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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/434,024	11/04/1999	KATSUTOMO TERASHIMA	VX992028	3387

7590 12/06/2001

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EXAMINER

JACKSON, CORNELIUS H

ART UNIT	PAPER NUMBER
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2881

DATE MAILED: 12/06/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/434,024

Applicant(s)

TERASHIMA ET AL.

Examiner

Cornelius H. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Acknowledgement

Acknowledgment is made that applicant's Amendment, filed on 7 September 2001, has been entered. Upon entrance of amendment, claim 3 was amended and new claims 5-8 were added. Now claims 1-8 are pending within this application.

Claim Objections

1. Claim 8 is objected to because of the following informalities: In claim 8, line 1, the phrase, "An excimer laser device according to claim 7" should be, "Gas for excimer laser according to claim 7". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Wakabayashi et al. (5642374). Wakabayashi et al. disclose an excimer laser device **Figs. 1 and 20; 25 and 26** in which gas for the excimer laser is sealed in a chamber **4** and pulse oscillation is carried out in the chamber to excite the gas for the excimer laser so to oscillate pulsed laser, wherein a predetermined amount of xenon gas (**col. 6, lines 8-9; col. 11, line 10**) having a predetermined concentration, **see col. 10, lines 2-4; col. 11, lines 19-22 and col. 12, lines 23-29 and 34-49**, is supplied to the gas for excimer laser in the chamber. (**Also, see abstract**)

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Regarding claims 2, 5 and 6, Wakabayashi et al. disclose a xenon gas cylinder **2**; **39**, sensing means **20**; **35**, and control means **7**; **31** of xenon gas concentration, **see col. 10, lines 2-9; col. 12, lines 13-29.**

Regarding claims 3 and 7, Wakabayashi et al. disclose that the laser contains an effective amount of an additive xenon gas, **see Fig. 20 and col. 10, lines 9-10.**

4. Claims 3-4 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Stein (3829551). Stein discloses a gas (air) wherein the gas containing an effective amount of 200 ppm or below of an additive xenon gas, **see col. 2, lines 27-28.** Since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 8, to the extent understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakabayashi et al. (5642374). Wakabayashi et al., as applied to above in claims 1 and 5, teach all the stated limitations except the concentration of the xenon gas. It has been held that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges

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by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Response to Arguments

7. Applicant's arguments filed 7 September 2001 have been fully considered but they are not persuasive.

Applicant argued that prior art fail to teach the presence of xenon in the laser chamber. As Applicant stated, prior art teaches the use of krypton, xenon, argon, or other such rare gas; therefore, it is inherent that xenon substitutes for krypton in combination of elements fluorine, krypton and neon.

Applicant argued that the prior art relied upon does not recognize the importance and significance of the use of the small amount of (the additive) xenon gas, it has been held that the fact that the references relied on by the PTO fail to evince an appreciation of the problem identified and solved by applicant is not, standing alone, conclusive evidence of the nonobviousness of the claimed subject matter. The references may suggest doing what the applicant has done even though workers in the art were ignorant of the existence of the problem. *In re Gershon*, 152, USPQ 602 (CCPA 1967).

In this case, as stated in the abstract, "an excimer laser feedback control circuit detects the output laser beam width and controls the beam width by controlling one or more of the laser voltage, **composition of the laser gas**, pressure or partial pressure of the laser gas, or **feed rate of a laser gas**." Therefore, through the feedback control circuit xenon gas would be added to the laser chamber to obtain a desired output.

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Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703)306-5981. The examiner can normally be reached on 8:30 - 4:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dzierzynski can be reached on (703)308-4782. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7721 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

chj

chj

November 30, 2001

*Dependence
Primary Examiner
for
SPE Dierckx*